

Remarks/Arguments:

Claims 78-90 are pending. Claims 78, 79, and 86-90 were previously withdrawn in response to a Restriction/Election requirement. Therefore, rejection of Claims 80-85 is addressed below.

Claims 80-82 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Byer et al. (US 5,036,220) in view of Tanabe (US 5,119,361). Claim 83 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Byer et al. in view of Tanabe and further in view of Hanihara (US 5, 430, 756). Claims 84 and 85 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Byer et al. in view of Tanabe and further in view of Covey (US 4,919,506).

Claims 80 and 84 have been amended, and Claims 81 and 85 have been cancelled. It is respectfully submitted that the claims are patentable over the art of record for the reasons set forth below.

Applicants' invention, as recited in amended Claim 80, includes a feature which is neither disclosed nor suggested by Byer et al., namely:

an optical wavelength conversion element . . . having . . .
an integrated modulator for modulating an output power of
the harmonic wave through application of a voltage.
(Emphasis added.)

This feature is found in the originally filed application at least at page 48, line 13 to page 49, line 14; page 57, lines 5-6; and Figure 26. The feature of "modulation of output power" in amended Claim 80 is supported by the use of the unit Watts (W) at page 57, lines 5-6, since it is known to one of ordinary skill in the art that the Watt is a unit of power. No new matter has been added.

By contrast, Byer et al. do not disclose or suggest this feature. Tanabe does not remedy this deficiency because Tanabe likewise does not disclose or suggest this feature.

It is because Applicants include the feature of

an optical wavelength conversion element . . . having . . .
an integrated modulator for modulating an output power of
the harmonic wave through application of a voltage

that the following advantages are achieved: Modulation can be achieved using a relatively low voltage of about 100 V. (See Specification, p. 48, lines 13-21.) Reduction in device size, weight, and cost can be achieved. (See specification, p. 48, lines 30-32.)

Claim 80 has been further amended for clarity and accuracy by substituting the word "pumping" for "pumped." No new matter has been added.

Accordingly, for the reasons set forth above, claim 80 is patentable over the art of record.

Amended Claim 84, while not identical to Claim 80, includes a feature similar to that quoted above from Claim 80. As discussed above, this feature is not disclosed or suggested in Byer et. al. Covey does not remedy this deficiency because Covey likewise does not disclose or suggest this feature.

Claim 84 has been further amended for clarity and accuracy by substituting the word "pumping" for "pumped." No new matter has been added.

Accordingly, for the reasons set forth above, Claim 84 is patentable over the cited art.

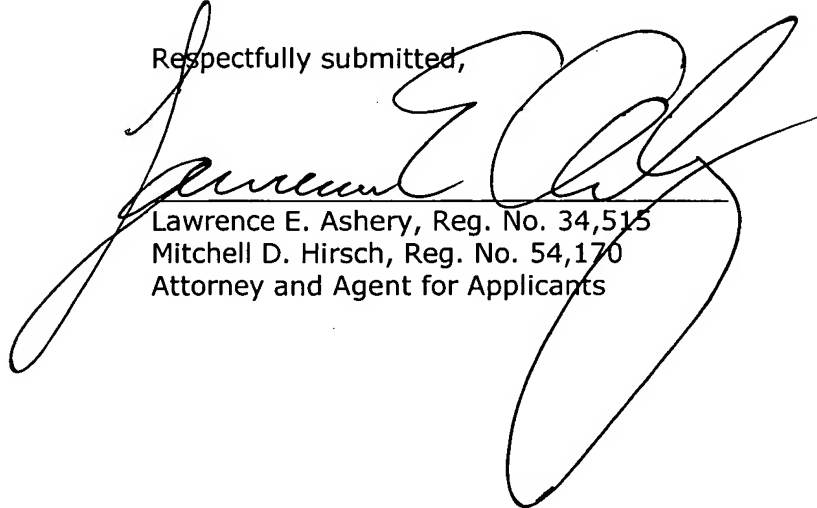
Claims 82 and 83 include all the features of amended Claim 80 from which they depend, including the one quoted above. Regarding Claim 83, the feature quoted above is not disclosed or suggested by Hanihara. Accordingly, Claims 82 and 83 are also patentable over the cited art for the reasons set forth above.

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In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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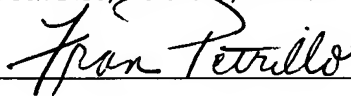
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